

Sigma Lithium Announces A Potential Increase Of Its Mineral Resource Estimate To Over 110mt, Amongst Largest Scale Globally

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MINERAL RESOURCE EXPLORATION PROGRAM UPDATE

- Sigma announces positive results from its Exploration Program of Phase 4.
 - Expected to represent an approximate 25% potential increase of mineral resource estimate of Sigma Lithium to 110 million tonnes, placing it amongst the largest scale lithium companies globally.
- The Company expects to further increase mineral resource resulting from an Accelerated Plan to drill a Phase 5 and beyond.
 - Exploration programs to date have identified up to 20Mt of potential additional mineral resource in a spodumene bearing pegmatite, which could represent a potential Phase 5.
- Accelerated Plan is expected to unlock significant further potential increase to the Company mineral resource, with additional exploration drilling of the following targets:
 - Remaining five former artisanal mines within Sigma Lithium's mineral concessions
 - Another 57 out of the 200 mapped pegmatites within the Company's mineral concessions.

SAO PAULO, Nov. 1, 2023 - Sigma [Lithium Corp.](#) ("Sigma Lithium" or the "Company") (NASDAQ: SGML, BVMF: S2GM34, TSXV: SGML), a leading global lithium producer dedicated to powering the next generation of electric vehicles with carbon neutral, responsibly sourced chemical grade lithium concentrate, is pleased to provide an update on its exploration program to date, conducted in close coordination with SGS Canada, including initial mineral resource potential for Phase 4 ("Exploration Program") and plans for acceleration of the Exploration Program ("Accelerated Plan").

The Company expects the results of the Exploration Program could represent an increase of its total mineral resource estimate to 110 Mt:

- The Company increased the exploration potential of Phase 4 to approximately 26 to 30Mt, with ore body extensions continuing to the east, based on the drilling results received to date (Table 1 below).
- This is a significant 25% potential increase to the Grotto do Cirilo mineral resource estimate, delivering further consistent high grade assay results which are to be incorporated into an updated NI 43-101 compliant technical report expected to be released in Q4 2023.

Please refer to the Company's National Instrument 43-101 technical report titled "Grotto do Cirilo Lithium Project Araçuaí and Itinga Regions, Minas Gerais, Brazil, Amended and Restated Technical Report" issued June 12, 2023 ("Technical Report"), filed on SEDAR and available on the Company's website.

- The Technical Report has a mineral resource estimate comprised of 77.0 Mt of measured and indicated mineral resources grading at 1.43% Li2O and 8.6 Mt of inferred mineral resources grading at 1.43% Li2O.

Ana Cabral, CEO commented: "The incredible success of our exploration campaign establishes Sigma Lithium as one of the largest lithium companies globally. Sigma is a current large-scale and low-cost producer but also has mineral resource estimates to potentially surpass 110 million tonnes of open pit deposits. This scale underscores our strategic relevance to become the foundation of global supply chains that will deliver the decarbonization of EV batteries.

"We consistently execute and deliver and by unlocking the NI 43-101 compliant mineral resource potential of the former artisanal mines in our mineral concessions, we are validating and closing the gap between the large scale of mineral resources registered within our mineral concessions in our regulatory body, ANM in Brazil and the NI 43-101," she concluded.

Significant Further Potential to Increase Mineral Resource

The results to date indicate that a further potential increase to the Company's mineral resource is expected to be delivered consistently over time from the following exploration drilling campaigns in an Accelerated Plan:

- Remaining five former artisanal mines within Sigma Lithium's mineral concessions to define the volumes and grades.
- Additional 57 pegmatites (out of the approximately 200 pegmatites mapped) within the Company's mineral concessions.

Phase 4 Exploration Program Update

Phase 4 was centered on the Muriel South and Lavra do Meio deposits. Both could be mined as an open pit, if warranted and economically viable based on a Feasibility Study.

- The Exploration Program has significantly increased the size of Muriel and Lavra do Meio deposits to potentially 23 to 26 Mt.
- The Company validated additional pegmatites: Maxixe and Tamboril, further increasing the total mineral resource potential.

Phase 4 strike extends up to 2.3 km along strike north-south, and the deposits remain open to both the east and west.

- Phase 4 is in very close proximity to Phase 3 (north of it) and initial drilling indicated potential connectivity of certain pegmatites (as per the Figures 1 and 2 below); and
- Intersecting high quality spodumene crystals and persistent spodumene-rich zones (Table 1 below)

The maiden resource statements for Muriel South and Lavra do Meio were published in January 2019, and this is the first update to both resources since 2019. The maiden resource for Muriel South was 5.6Mt @ 1.14% Li₂O M&I with an additional 0.7Mt @ 1.06% Li₂O, while Lavra do Meio was 2.3Mt @ 1.09% Li₂O M&I, with an additional 0.3Mt @ 0.87% Li₂O.

Table 1: Phase 4 Pegmatites Exploration Potential At Various Cut-Off Grades⁽¹⁾

Exploration Zones	2019 M&I	2019 Inferred Lower Range	Upper Range	
		Tonnage (Mt)	Tonnage (Mt)	
Muriel South	5.6	0.7	18	20
Lavra do Meio	2.3	0.3	5	6
Tamboril and Maxixe -	-	-	3	4
Total	7.9	1.0	26	30

Note 1: The potential quantity and grade of the lithium mineralization for Muriel South, Lavra Do Maio, Maxixe and Tamboril are conceptual in nature, there has been insufficient exploration to estimate Mineral Resources and it is uncertain if exploration will confirm the target ranges.

The company is highly encouraged with the initial assay results from the Tamboril and Maxixe deposits that suggest that the mineralization encountered is directly related to the Phase 3 mine and confirms that Phase 3 and Phase 4 are a continuous mineralization.

Further assay results for the completed holes at Maxixe and Tamboril are pending and will be released once received to produce an updated Mineral Resource Estimate.

Phase 5 and Accelerated Plan

As part of the Exploration Program, Sigma Lithium has also identified additional pegmatites that could potentially yield up to 20 Mt of incremental mineral resource in a potential Phase 5.

The Company is conducting significant exploration RC drilling, trench work and sampling, in 57 mineralized pegmatites (out of the 200 pegmatites mapped within the Company's mineral concessions). The Exploration Program defined the surface area and the weathered mineralogy for these 57 pegmatites. The Accelerated Plan will include drilling exploratory core diamond drill holes into each of these targets.

The Company increased its exploration efforts in an Accelerated Program: a total of 8 core diamond drills currently operating in the Grotá do Cirilo region with 20,000m planned for the next 7 weeks. The current drilling priority is to confirm and further extend the size of the pegmatite swarm at the Phase 4 area.

Iran Zan, MAIG, co-Head of Geology and co-General Manager, "Our Phase 4 is the result of the hard work and relentless commitment of Sigma's geology team over the last year. The results derived from these months of drilling activities are impressive, confirming the projections for Phase 4. The exploration campaign provided an understanding of the connectivity of the pegmatites in the area between Phase 3 and Phase 4. The ore bodies show consistent strike and depth with intercepts, grades, and coarse spodumene crystal quality. We are very optimistic about the 2.3 km long strike of Phase 4 and its depth of approximately 300 meters, which is still open to the east."

Current Mineral Resource and Phase 1, 2 and 3 Results

The Amended and Restated Technical Report from June 12, 2023 shows a Consolidated Mineral Resource on the Grotá do Cirilo property of 77Mt of Measured and Indicated Resources at a grade of 1.43% Li₂O and Inferred Resources of 8.6Mt also at a grade of 1.43% Li₂O (Table 2).

Tables 3, 4 and 5 show the contribution to the Consolidated Resource from Phases 1, 2 and 3.

Please refer to the Company's National Instrument 43-101 technical report titled "Grotá do Cirilo Lithium Project Araçuaí and Itinga Regions, Minas Gerais, Brazil, Amended and Restated Technical Report" issued June 12, 2023, for further information on the Mineral Resource statements.

Table 2: Grotá do Cirilo Consolidated Mineral Resource June 2023

Cut-Off Grade (% Li ₂ O) Category		Tonnes (Mt) (% Li ₂ O)	
0.5 %	Measured	37.1	1.43 %
0.5 %	Indicated	39.9	1.43 %
0.5 %	Measured & Indicated	77.0	1.43 %
0.5 %	Inferred	8.6	1.43 %

Table 3: Phase 1 Mineral Resource Estimate

Cut-Off Grade (% Li2O) Category	Tonnes (Mt) (% Li2O)		
0.5 %	Measured	10.2	1.59
0.5 %	Indicated	7.2	1.49
0.5 %	Measured & Indicated	17.4	1.55
0.5 %	Inferred	3.8	1.58

Table 4: Phase 2 Mineral Resource Estimate

Cut-Off Grade (% Li2O) Category	Tonnes (Mt) (% Li2O)		
0.5 %	Measured	18.7	1.41
0.5 %	Indicated	6.3	1.30
0.5 %	Measured & Indicated	25.1	1.38
0.5 %	Inferred	3.8	1.39

Table 5: Phase 3 Mineral Resource Estimate

Cut-Off Grade (% Li2O) Category	Tonnes (Mt) (% Li2O)		
0.5 %	Measured	2.4	1.56
0.5 %	Indicated	24.3	1.48
0.5 %	Measured & Indicated	26.7	1.49

Detailed Phase 4 Exploration Program

Sigma Lithium's Phase 4 deposits are in the Cirilo Grota region, in the same continuous mineralization line to the Phase 2 and Phase 3 deposits. The Phase 4 pegmatite dikes run parallel to those defined at the Phases 2 and 3 deposits. Drill testing to date has confirmed that the Phase 4 pegmatites extend to at least 400 m below surface.

Drilling results from the Maxixe and Tamboril deposits have confirmed the presence of spodumene crystals with assay results confirming substantial intersections of strong lithium mineralization. Significant results include the following highlight drilling intercepts:

- DH - MAX - 03 1.40% Li2O over 26.0m, including 2.34% Li2O over 9.07 m
- DH - TAM - 10 1.00 % Li2O over 7.03 m, including 1.23% Li2O over 3.00 m
- DH - LDM - 04 1.79% Li2O over 27.61 m, including 3.26% Li2O over 10.00 m
- DH - LDM - 05 1.31% Li2O over 31.85 m, including 1.81% Li2O over 11.29 m
- DH - LDM - 14 1.17% Li2O over 22.83 m, including 2.02% Li2O over 7.81 m

Table 6: Phase 4 Intercept Results

BHID	From (m)	To (m)	Length (m)	Grade (Li2O%)
DH-MUR-021 163	198	35	1,39	
DH-MUR-027 151	177	26	1,78	
DH-MUR-031 142	171	29	1,57	
DH-MUR-033 170	192	22	1,32	
DH-MUR-034 180	223	43	1,47	
DH-MUR-034 234	244	9	1,79	
DH-MUR-039 225	245	20	1,38	
DH-MUR-055 174	190	16	1,22	
DH-MUR-060 114	122	8	1,6	
DH-MUR-091 284	295	11	1,28	
DH-MUR-112 251	285	34	1,62	
DH-MUR-114 194	218	24	1,7	
DH-MUR-132 213	227	15	1,44	
DH-MUR-206 214	246	32	1,27	
DH-MUR-184 145	150	6	1,19	

QUALITY ASSURANCE AND CONTROL

Diamond drilling samples were collected and sent to the SGS-Geossol laboratory. All diamond drilling core samples submitted for assay were saw cut with one-half supplied for assay and one-half archived for reference. The physical preparation follows the steps: drying, crushing of 75% to 3mm, homogenization, splitting of Jones, and pulverization of 100g in a Tungsten carbide pan until 150 meshes with 95% of passing pulp. In 5% of the samples, the control of particle size and loss of mass is carried out in the crushing and pulverization stages (QCgranul and QCloss of mass). The analytical method adopted was ICP90A, carrying out the sodium peroxide (Na₂O₂) fusion and ICP AES. Samples with the content of Li₂O% > 3.225 (over-limit for ICP90A) were reanalyzed by ICP90Q, consisting of sodium peroxide (Na₂O₂) fusion in concentrates (ICP AES).

Sampling was carried out following strict QA/QC procedures. Certified reference materials (standards) were inserted into the sample stream. Blanks AMIS0577, AMIS0484, and AMIS0865 were submitted at a rate of 1 per 29 samples and introduced preferentially at upper or lower contacts of the main pegmatitic intercepts. Standards AMIS0341, AMIS0342, AMIS0565, and AMIS0408 were inserted at the same rate as blanks, mostly within the pegmatite intervals. In addition, QC controls were added preferably in pegmatite samples with a satisfactory content of Li₂O%, enough to make a fair comparison between the original samples and controls. Coarse and pulp duplicates were injected at a rate of 1 per 40 samples, while the check samples were at a rate of 1 per 20 samples. All check samples were dispatched to a second laboratory analysis and sent to ALS in Vancouver. The ALS results were compared with the SGS-Geosol results to verify the reliability of the primary laboratory results.

QUALIFIED PERSONS

The technical and scientific information related to mineral resource estimates in this news release has been reviewed and approved by Marc-Antoine Laporte P.Geo., M.Sc., of SGS. Mr. Laporte is a Qualified Person as defined by National Instrument 43-101 and is independent of Sigma Lithium.

The mining and mineral reserve estimates in this news release have been reviewed and approved by Porfirio Cabaleiro Rodriguez P.Eng, Mining Engineer of GE21 Consultoria Mineral Brazil. Mr. Rodriguez is a Qualified Person as defined by National Instrument 43-101 and is independent of Sigma Lithium.

The technical information in this news release, including statements regarding geology and potential mineral resources, has been elaborated by Iran Zan MAIG (Membership number 7566), Director of Geology and exploration department of Sigma Lithium, Mr Iran Zan is a Qualified Person internal of Sigma [Lithium Corp.](#)

ABOUT SIGMA LITHIUM

Sigma Lithium (NASDAQ: SGML, TSXV: SGML, BVMF: S2GM34) is a leading global lithium producer dedicated to powering the next generation of electric vehicle batteries with carbon neutral, socially and environmentally sustainable chemical-grade lithium concentrate.

Sigma Lithium has been at the forefront of environmental and social sustainability in the EV battery materials supply chain for six years and it is currently producing Triple Zero Green Lithium from its Grotão do Cirilo Project in Brazil. Phase 1 of the project is expected to produce 270,000 tonnes of Triple Zero Green Lithium annually (36,700 LCE annually). If it is determined to proceed after completion of an ongoing feasibility study, Phase 2 & 3 of the project are expected to increase production to 766,000 tonnes annually (or 104,200 LCE annually). The project produces Triple Zero Green Lithium in its state-of-the-art Greentech lithium plant that uses 100% renewable energy, 100% recycled water and 100% dry-stacked tailings.

Please refer to the Company's National Instrument 43-101 technical report titled "Grotão do Cirilo Lithium Project Araçuaí and Itinga Regions, Minas Gerais, Brazil, Amended and Restated Technical Report" issued June 12, 2023, which was prepared for Sigma Lithium by Homero Delboni Jr., MAusIMM, Promon Engenharia; Marc-Antoine Laporte, P.Geo, SGS Canada Inc; Jarrett Quinn, P.Eng., Primero Group Americas; Porfirio Cabaleiro Rodriguez, (MEng), FAIG, GE21 Consultoria Mineral; and Noel O'Brien, B.E., MBA, F AusIMM (the "Updated Technical Report"). The Updated Technical Report is filed on SEDAR and is also available on the Company's website.

For more information about Sigma Lithium, visit <https://www.sigmalithiumresources.com/>

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FORWARD-LOOKING STATEMENTS

This news release includes certain "forward-looking information" under applicable Canadian and U.S. securities legislation, including but not limited to statements relating to timing and costs related to the general business and operational outlook of the Company, the environmental footprint of tailings and positive ecosystem impact relating thereto, donation and upcycling of tailings, timing and quantities relating to tailings and Green Lithium, achievements and projections relating to the Zero Tailings strategy, achievement of ramp-up volumes, production estimates and the operational status of the Grotão do Cirilo Project, and other forward-looking information. All statements that address future plans, activities, events, estimates, expectations or developments that the Company believes, expects or anticipates will or may occur is forward-looking information, including statements regarding the potential development of mineral resources and mineral reserves which may or may not occur. Forward-looking information contained herein is based on certain assumptions regarding, among other things: general economic and political conditions; the stable and supportive legislative, regulatory and community environment in Brazil; demand for lithium, including that such demand is supported by growth in the electric vehicle market; the Company's market position and future financial and operating performance; the Company's estimates of mineral resources and mineral reserves, including whether mineral resources will ever be developed into mineral reserves; and the Company's ability to operate its mineral projects including that the Company will not experience any materials or equipment shortages, any labour or service provider outages or delays or any technical issues. Although management believes that the assumptions and expectations reflected in the forward-looking information are reasonable, there can be no assurance that these assumptions and expectations will prove to be correct. Forward-looking information inherently involves and is subject to risks and uncertainties,

including but not limited to that the market prices for lithium may not remain at current levels; and the market for electric vehicles and other large format batteries currently has limited market share and no assurances can be given for the rate at which this market will develop, if at all, which could affect the success of the Company and its ability to develop lithium operations. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information. The Company disclaims any intention or obligation to update or revise any forward-looking information, whether because of new information, future events or otherwise, except as required by law. For more information on the risks, uncertainties and assumptions that could cause our actual results to differ from current expectations, please refer to the current annual information form of the Company and other public filings available under the Company's profile at www.sedar.com.

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